

WHAT IS CLAIMED IS:

1           1. A fault monitoring method of a commodity management  
2 radio communicating apparatus in which plural portable radio  
3 communication terminals in a commodity management system manage  
4 commodities by communicating with an inventory controller via a  
5 radio communication base station, said fault monitoring method  
6 comprising:

7 a step of automatically executing a test of a radio  
8 communication section in said portable radio communication  
9 terminals when a number of retrying times of radio communication  
10 between said portable radio communication terminals and said  
11 radio communication base station exceeds a predetermined number  
12 of times; and

13 a step of displaying a fault of said radio communication  
14 section on a display section of said portable radio communication  
15 terminals when said fault occurs.

1           2. The fault monitoring method of the commodity management  
2 radio communicating apparatus according to Claim 1, wherein a call  
3 time interval of retrying said radio communication between said  
4 portable radio communication terminals and said radio  
5 communication base station is set longer than an average  
6 communication time of said radio communication between said  
7 portable radio communication terminals and said radio  
8 communication base station in said commodity management system.

### 3. The fault monitoring method of the commodity management radio communicating apparatus according to Claim 1, wherein said

3 test for said radio communication section is executed after  
4 checking that said radio communication between each said portable  
5 radio communication terminal and said radio communication base  
6 station is vacant continuously in a case out of an execution  
7 prohibiting time zone in said commodity management system.

1           4.     The fault monitoring method of the commodity  
2 management radio communicating apparatus according to Claim 3,  
3 wherein said test for said radio communication section is executed  
4 after passing a predetermined time by returning to a check of a  
5 vacant state in said case out of said execution prohibiting time  
6 zone in said commodity management system when said radio  
7 communication between each said portable radio communication  
8 terminal and said radio communication base station and is waited  
9 for until said vacant state.

1       5.     The fault monitoring method of the commodity  
2 management radio communicating apparatus according to Claim 3,  
3 wherein said test for said radio communication section is executed  
4 after passing a predetermined time by returning to a check of said  
5 execution prohibiting time zone of said test in a case in said  
6 execution prohibiting time zone in said commodity management  
7 system and is waited for until out of said execution prohibiting  
8 time zone.

1           6.       The fault monitoring method of the commodity  
2 management radio communicating apparatus according to Claim 4,  
3 wherein said test for said radio communication section is executed  
4 after passing a predetermined time by returning to a check of said

5 execution prohibiting time zone of said test in a case in said  
6 execution prohibiting time zone in said commodity management  
7 system and is waited for until out of said execution prohibiting  
8 time zone.

1 7. A storage medium storing a fault monitoring program  
2 to cause a computer to carry out a fault monitoring method of a  
3 commodity management radio communicating apparatus in which  
4 plural portable radio communication terminals in a commodity  
5 management system manage commodities by communicating with an  
6 inventory controller via a radio communication base station, said  
7 fault monitoring method comprising:

8 a step of automatically executing a test of a radio  
9 communication section in said portable radio communication  
10 terminals when a number of retrying times of radio communication  
11 between said portable radio communication terminals and said  
12 radio communication base station exceeds a predetermined number  
13 of times; and

14 a step of displaying a fault of said radio communication  
15 section on a display section of said portable radio communication  
16 terminals when said fault occurs.

1 8. A fault monitoring program to cause a computer to carry  
2 out a fault monitoring method of a commodity management radio  
3 communicating apparatus in which plural portable radio  
4 communication terminals in a commodity management system manage  
5 commodities by communicating with an inventory controller via a  
6 radio communication base station, said fault monitoring method  
7 comprising:

8 a step of automatically executing a test of a radio  
9 communication section in said portable radio communication  
10 terminals when a number of retrying times of radio communication  
11 between said portable radio communication terminals and said  
12 radio communication base station exceeds a predetermined number  
13 of times; and

14 a step of displaying a fault of said radio communication  
15 section on a display section of said portable radio communication  
16 terminals when said fault occurs.